



Bureau of State Laboratory Services
Office of Laboratory Licensure, Certification & Training

3443 N. Central Avenue, Suite 810
Phoenix, Arizona 85012
(602) 255-3454
(602) 255-1070 FAX
Technical Support Hot-Line 1-800-952-0374

JANE DEE HULL, GOVERNOR

DATE: September 15, 1995
SUBJECT: Information Update #18

1. This is a clarification regarding the acceptable CCV criteria for EPA methods 502.2 and 524.2. EPA's publication titled *"Technical Notes on Drinking Water Methods"* dated October 1994 had a confusing "clarification" regarding the changes in the Quality Assurance Procedures, on page 41. It indicated that for 502.2, the CCV criteria had changed from $\pm 20\%$ to $\pm 30\%$. Subsequently we received conflicting messages from EPA and only recently we have received a clarification that the original $\pm 20\%$ CCV acceptance criteria will be enforced for 502.2. For 524.2 the CCV criteria will remain at $\pm 30\%$. The $\pm 20\%$ criteria for 502.2 will not be enforced by our Office during the period between March 17, 1995 and September 16, 1995. For clarification, March 17, 1995 is the date of the Information Update which stated that the CCV acceptance criteria for 502.2 had changed from $\pm 20\%$ to $\pm 30\%$.
2. There is no specification given in EPA methods for the holding time requirement for cyanide analysis in non-aqueous samples. In the Revision 0 of SW 846 dated 1986, the Table 2-16 in Chapter 2, *Required Containers, Preservation Technique, and Holding times*, addresses only the aqueous samples and does not address the non-aqueous samples, according to a telephone conversation with EPA. The EPA method 9013, for non-aqueous samples, allows 14 days before distillation for the properly preserved samples held at 4 deg C. EPA 335.4, for waste water and drinking water, allows 14 days for the analysis of samples which are properly preserved at pH greater than 12. This Office will therefore, allow 14 days for non-aqueous samples to be distilled and another 14 days after distillation for the completion of analysis.
3. We had several inquiries regarding the holding time for sulfide analysis by 4500-S² because it is not clearly specified in the method. We had a conversation with James O'Dell of USEPA\NERL\ARD regarding this matter. He referred to *Table 1060:1, Summary of special sampling or handling requirements, in Standard Methods, 18th Edition, 1992*. For sulfide determination this table gives the following preservation procedures; Refrigerate; add 4 drops 2N Zinc acetate/100 mL; add NaOH to pH >9 (Zinc Acetate should be added first to the water sample and then NaOH; this necessitates the addition of NaOH in field; refrigerate= storage at 4⁰ C, in the dark). He commented on the fact that the table takes precedence over what is contained in the methods. The reason given for this is that the table is updated on a more frequent basis allowing for minor corrections to the methods to be made more quickly. This, he pointed out is also true for the tables found in the *Federal Register* updating EPA methods. Also note in the same table, *Maximum Storage Recommended* is 28 days\Regulatory holding time is 7 days. He pointed out that the 7 day holding time from the *Federal Register* takes precedence over the recommended holding time by *Standard Method*.

4. The following text was sent to us from Jerry Smit, Deputy Section Manager, UST Section, ADEQ, for inclusion in this Update. If you have any questions regarding this matter, please contact the ADEQ UST Section at 207-4307.

The Arizona Department of Environmental Quality Underground Storage Tanks Section will accept soil analytic results obtained through use of EPA test method 8021 and 8021A in cases where either or both EPA 8020 or 8010 would normally have been used. Where reimbursement from the State Assurance Fund will be sought, the target list should be adapted so that the analytic suites are appropriate for investigation of the regulated substances stored in or released from an underground storage tank. For example, the analytic suite under EPA test method 8020 is appropriate for an investigation of a gasoline release, while the analytic suite under EPA test method 8010 is not normally appropriate. Extra costs for such inappropriate analysis will not be reimbursed.

With regard to synthetic volatile organic contaminants, the newer EPA test methods have larger analytic suites than EPA test method 8010. Until the ADEQ prepares written policy stating otherwise, analysis for synthetic volatile contaminants for waste oil USTs should, at a minimum, test for the analytic suite published under the EPA test method 8010.

In general, the ADEQ UST Section will accept analytical test methods approved by the ADHS that are appropriate for analysis of soil samples for the regulated substance(s) under investigation. Make note that, to ensure full reimbursement of costs through the State Assurance Fund, service providers should use lower cost analytical methods (typically GC) unless site specific conditions warrant use of more expensive methods (typically GC/MS).

5. We have finalized our Environmental Organic Chemistry workshop. Following is a list of the presentations and the names of the speakers.

1. Method Flexibility? Can it be done?

Plenary session to include drinking water and wastewater.

EPA Representative

2. Let's talk about Method 502.2

Presents an understanding of the method and its requirements.

EPA Representative

3. Auto sampler (sparger and vials) and Concentrator

Trouble shooting and maintenance of a purge and trap system.

Tekmar - Technical Support

4. Know your Detectors

Troubleshooting and maintenance of conductivity and photoionization detectors.

Robert E. Fritz, Equipment Technician

5. Methods 525.1/525.2

Extraction procedures and techniques include a breakout session.

Dennis Blevins, Senior Scientist, ANSYS

6. Multi Peak Compounds and Quantitation

Quantitation techniques and recognition of technical mixtures specifically Chlordane, Toxaphene, Gasoline and Diesel.

Jeff Landis, GC Team Leader, Lockheed Laboratories

7. How to get the most out of your chromatography software and learn its applications.

Covers peak resolution, retention time windows, proper baseline drawing, acceptable calibration curves.

Kumar/Pullman/Donohue, Scientists, Lockheed Laboratories and Charlie Koch, Consultant, Hewlett Packard

This workshop will be held November 1 - 2, 1995, at the Grace Inn Ahwatukee. We have determined the cost of this workshop to be \$150.00. If you have not already done so, please call or fax to pre-register. Seats are available on a first come first serve basis. Vendors sponsoring breaks or workshops will have display tables set up in an adjacent room. Detailed brochures will be mailed out in a week.

6. If you have any questions regarding the Updates, please call Prabha Acharya, program Manager, Technical Resources and Training, at the above numbers.

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